

# PATENT SPECIFICATION

594,221



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## PROVISIONAL SPECIFICATION

### Improvements in Bunkers, Bins and like Receptacles

We, G. A. HARVEY & Co. (LONDON) LIMITED, a British Company, and JOSEPH YARDLEY, a British Subject, both of Greenwich Metal Works, Woolwich Road, London, S.E.7, do hereby declare the nature of this invention to be as follows:—

This invention relates to bunkers, bins, and like receptacles for the reception of coal and the like or other materials.

As at present constructed the various component parts of metal bunkers are formed of plates provided with flanges along certain of their edges, said plates and flanges being drilled and riveted and in part welded together into a permanent structure.

The object of the present invention is to provide a structure in which the component parts are secured together in assembled relationship without rivets and in a manner which will enable said parts to be packed together for transit or storage purposes and easily assembled on delivery.

According to this invention the several component parts are each furnished with a bent over edge or channel, certain of said components being assembled and secured together by interlocking with each other while other parts are secured by an independent element arranged to interlock with two component parts.

According to one embodiment of this invention the bunker or the like is composed of the usual six main parts, viz.:—top and bottom and four side walls. The front side wall is provided with an aperture having on the outer face a pair of guides riveted to the two side edges of the aperture to receive a sliding shutter door and on the inner surface of said wall

with an angularly disposed plate arranged immediately above the aperture to remove the pressure of the coal or the like on the inner face of the door. The top of the bunker is furnished with a hinged flap door through which the coal or the like is entered into the bunker.

To assemble the component parts each of which is provided along certain edges with an interlocking channel, the bottom plate is raised on one end, the channel on the bottom edge of the front plate is caused to engage with the channel on the front edge of the bottom and slid into position, the front edge of the top plate is then caused to engage with the top channel on the front plate and slid into position. The assembled parts are then turned over so that the front plate is resting on the floor, the two end plates are then slid into engagement with the top and bottom plates respectively. The assembled parts are then turned over so that one of the end plates is resting on the floor, the back plate is then slid on to the back edges of the top and bottom plates respectively. To complete the assembly an angular element is slid onto the channels provided on the adjacent edges of the front, side and back plates, constituting the four corners of the bunker, the lower ends of said element are bent over and the upper ends are welded, bolted or otherwise secured in position.

Dated this 29th day of June, 1945.

PHILLIPSS,

Chartered Patent Agents,  
Bank Chambers, 329, High Holborn,  
London, W.C.1,  
For the Applicants.

## COMPLETE SPECIFICATION

### Improvements in Bunkers, Bins and like Receptacles

We, G. A. HARVEY & Co. (LONDON) LIMITED, a British Company, and JOSEPH YARDLEY, a British Subject, both of Greenwich Metal Works, Woolwich

Road, London, S.E.7, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained

in and by the following statement:—

This invention relates to bunkers, bins, and like receptacles for the reception of coal and the like or other materials.

5 It is known to construct metal cabinets, coal bunkers and the like in parts by securing the sides to the front or back by turning over or back upon itself each vertical edge of the metal sheets forming  
10 the sides, front or back to form a narrow slot between the turned-back edge and the sheet and then interlocking the said sheets by sliding the adjacent turned-over ends over and along one another or metal  
15 strips, suitably shaped, may be used to connect some or all of the parts together.

It is also known to construct the bodies of pit tubs and like structures in several sections comprising a bottom member, two  
20 side members and two end members having inter-engaging vertical and horizontal hook edges and securing the corners of the structure by means of cleats bolted thereto.

25 The object of the present invention is to provide a structure in which the component parts are secured together in assembled relationship without rivets and in a manner which will enable said parts  
30 to be packed together for transit or storage purposes and easily assembled on delivery.

According to this invention the several component parts are each furnished with  
35 some or all of their edges with a bent over edge or channel, said components being assembled and secured together by interlocking with each other on some of their edges while certain adjacent edges  
40 are secured by an independent element arranged to interlock with the channels provided on said edges.

In the accompanying drawings which illustrate an embodiment of this inven-  
45 tion:—

Figure 1 is a perspective view of the component parts of a bunker assembled together, and,

50 Figure 2 is a similar view with the component parts separated from each other but in co-related position.

According to the embodiment of the invention illustrated in the drawings, the bunker or the like is composed of the  
55 usual six main parts viz.:—top 1, bottom 2, front and back walls 3 and 4 and side walls 5 and 6. The front wall 3 is provided with an aperture 7 having on the outer face of the wall, a pair of  
60 guides 8 riveted adjacent the two side edges of the aperture to receive a sliding shutter door 9 and on the inner surface of said wall with an angularly disposed plate 10 arranged immediately above the

aperture to remove the pressure of the  
65 coal or the like on the inner face of the door 9, the extreme ends of said plate 10 are arranged to rest in supports 10<sup>a</sup> provided on the inner faces of the side walls  
70 5 and 6. The top 1 of the bunker is furnished with an aperture 11 through which the coal or the like is entered into the bunker, said aperture being closed by a hinged flap door 12.

To assemble the component parts, each  
75 of which is provided along certain edges with an interlocking channel, the bottom plate 2 is placed on one end, the channel 3<sup>1</sup> on the bottom edge of the front plate 3 is caused to engage with the channel 2<sup>1</sup>  
80 on the front edge of the bottom plate 2 and slid into position; the front edge 1<sup>1</sup> of the top plate 1 is then caused to engage with the channel 3<sup>2</sup> on the top edge of the front plate 3 and slid into position.  
85 The parts thus assembled are turned over so that the front plate 3 is resting on the floor, the top edge 5<sup>1</sup> and the channel 5<sup>2</sup> on the bottom edge of the end plate 5 are then slid onto the channels 1<sup>2</sup> and 2<sup>2</sup>  
90 respectively of the top and bottom plates 1 and 2 and the corresponding edges 6<sup>1</sup> and 6<sup>2</sup> on the end plate 6 are slid onto the channels 1<sup>3</sup> and 2<sup>3</sup> respectively. The parts thus assembled are turned over so  
95 that one of the end plates 5 or 6 is resting on the floor, the channels 4<sup>1</sup> and 4<sup>2</sup> on the top and bottom edges respectively of the back plate 4 are slid into the channels 1<sup>4</sup> and 2<sup>4</sup> respectively on the top  
100 and bottom plates respectively. To complete the assembly an angular element 13 is slid into the channels provided on the adjacent edges of the front, side and back plates, constituting the four vertical  
105 corners of the bunker, the lower ends 13<sup>1</sup> of each of the angular elements 13 are bent over and the top ends are welded, bolted or otherwise secured.

Having now particularly described and  
110 ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. In bunkers and like receptacles for  
115 the reception of coal and the like or other materials, the provision on some or all of the edges of the several component parts of a bent over edge or channel, said components being assembled and secured  
120 together by interlocking with each other on some of their edges while certain adjacent edges are secured together by an independent element arranged to interlock with the channels provided on said  
125 edges.

2. A bunker or like receptacle having its component parts constructed for

assembly in the manner substantially as described and as illustrated in the accompanying drawings.

Dated this 29th day of June, 1946.

PHILLIPSS.

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[This Drawing is a reproduction of the Original on a reduced scale.]

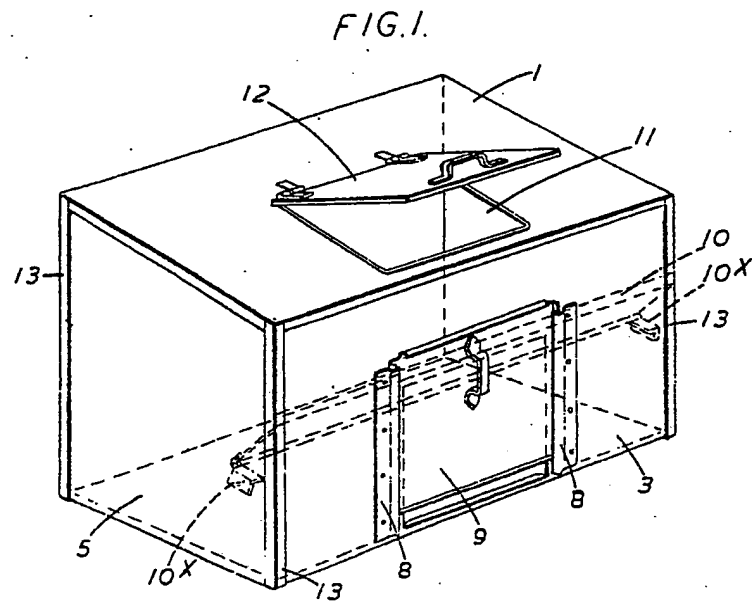
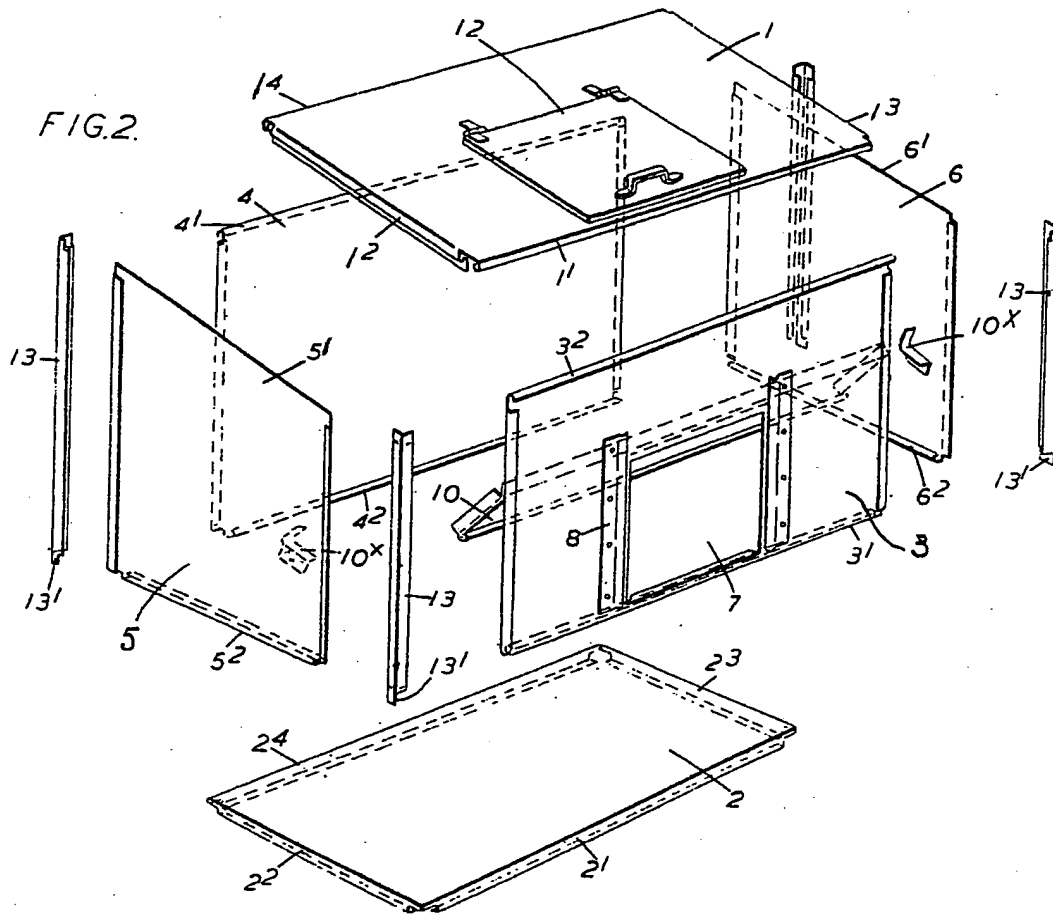


FIG.



FIG.2.



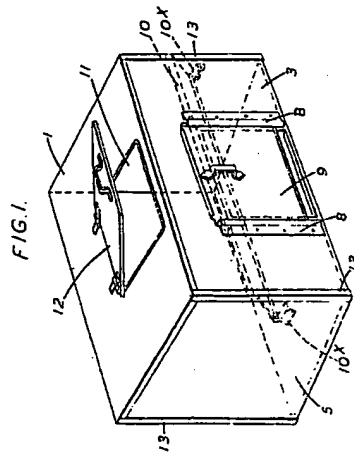


FIG. 1.

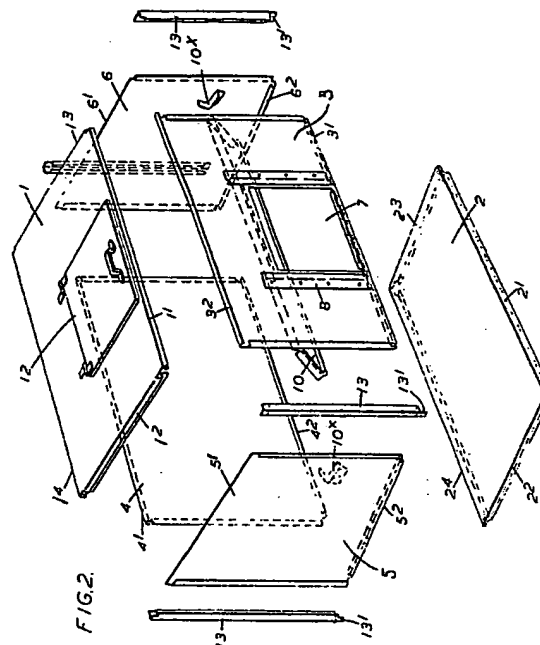


FIG. 2.